

CLAIMS:

1. Apparatus for reducing power dissipation in an optical drive system between consecutive read/record actions, the system comprising a radiation source, focussing means for directing a radiation spot on a data storage medium (1) at a position thereon at which it is required to perform a read/record action, and a servo control arrangement (6) including at least a tilt compensation mechanism, the apparatus comprising means for switching off said tilt compensation mechanism and means for causing said radiation spot to be returned to, or maintained at, substantially the same position on said optical storage medium (1) while said tilt compensation mechanism is inoperative.

2. Apparatus according to claim 1, wherein said servo control arrangement (6) includes a plurality of compensation mechanisms, including focus and radial tracking functions, and any one or more of said compensation mechanisms, except said focus and radial tracking functions, is switched off in order to reduce power dissipation between consecutive read/record actions.

3. Apparatus according to claim 1 or claim 2, wherein the position on the optical storage medium (1) at which the radiation spot is maintained, or to which the radiation spot is returned, beneficially corresponds to an address on the optical storage medium (1) at which a previous read/record action was terminated.

4. An optical drive system comprising a radiation source, focussing means for directing a radiation spot on a data storage medium (1) at a position thereon at which it is required to perform a read/record action, a servo control arrangement (6) including at least a tilt compensation mechanism, and apparatus according to any one of claims 1 to 3.

5. An optical drive system according to claim 4, further comprising an optical pickup unit (2) including the radiation source and focussing means, and a sledge motor for controlling movement of the optical pickup unit in a radial direction relative to the optical storage medium (1), the apparatus comprising means for disabling the sledge motor function.

6. An optical drive system according to claim 5, wherein the sledge motor function is disabled.

5 7. An optical drive system according to any one of claims 4 to 6, wherein the radiation spot is maintained at, or returned to, the same position on the optical storage medium (1) using a radial actuator voltage measurement.

8. An optical drive system according to claim 7, wherein the radiation spot is
10 maintained at, or returned to, the same position on the optical storage medium (1) using an average radial actuator voltage measurement.

9. An optical drive system according to claim 8, arranged and configured such that, before the tilt compensation mechanism is switched off, the average radial actuator
15 voltage is read and set as a reference, and once the tilt compensation mechanism has been switched off, the average radial actuator voltage is read again, one or more times, and if the value of the read average radial actuator voltage has an absolute difference greater than some predetermined threshold relative to said reference, the radiation spot is caused to jump back by one track on said optical storage medium (1).

20 10. An optical data storage system including an optical drive system according to any one of claims 4 to 9.

11. A method of reducing power dissipation in an optical drive system between
25 consecutive read/record actions, the system comprising a radiation source, focussing means for directing a radiation spot on a data storage medium (1) at a position thereon at which it is required to perform a read/record action, and a servo control arrangement (6) including at least a tilt compensation mechanism, the method comprising switching off said tilt compensation mechanism and causing said radiation spot to be returned to, or maintained at,
30 substantially the same position on said optical storage medium (1) while said tilt compensation mechanism is inoperative.